

SN 10/627,261
P-2487

CLAIM AMENDMENTS:

1. (Canceled).

2. (Currently Amended) A self activated arresting door closer comprising:

a cylinder,

a piston reciprocally displaceable within said cylinder,

a piston rod connected to said piston,

said piston rod having a free end extending beyond the end of said cylinder,

a compression spring normally biasing said piston toward a door closing position, and

a self activated arresting mechanism for arresting an associated door in an open position,

said arresting mechanism including a cam means and a complementary follower means,

one of said means connected to said piston rod and the other of said means connected to said cylinder wherein one of said means is fixedly connected and the other of said means is rendered rotatable relative to said fixed means,

said cam means ~~includes~~ including

an indexing cam,

a plurality of arresting cams spaced from said indexing cam

SN 10/627,261
P-2487

to define ~~an annular~~ a circumscribing channel therebetween,
and said arresting cams defining therebetween between
adjacent pairs thereof a channel opening in communication with
said ~~annular~~ circumscribing channel.

3. (Original) A self activated arresting door closer as
defined in Claim 2 wherein said indexing cam comprises an annular
cam having alternating peaks and dwells.

4. (Original) A self activated arresting door closer as
defined in Claim 2 wherein said indexing cam includes a plurality
of spaced apart cam segments to define therebetween a space for
receiving said complementary follower means.

5. (Original) A self activated arresting door closer as
defined in Claim 4 wherein each of said arresting cams include a
dwell notch, and said space being disposed opposite a channel
opening formed between adjacent arresting cams.

6. (Currently Amended) A self activated arresting door
closer as defined in Claim 2 wherein:
said indexing cam includes a series of alternating peaks and
dwells, and

SN 10/627,261
P-2487

said arresting cams each including a dwell located substantially opposite said alternating peaks of said indexing cam.

7. (Original) A self activated arresting door closer as defined in Claim 2 wherein:

said indexing cam includes a series of alternating peaks and dwells, and

said channel opening being disposed substantially opposite alternate peaks of said indexing cam.

8. (Canceled).

9. (Currently Amended) ~~A self activating arresting door closer as defined in Claim 1 wherein~~ A self activated arresting door closer comprising:

a cylinder,
a piston reciprocally displaceable within said cylinder,
a piston rod connected to said piston,
said piston rod having a free end extending beyond the end of said cylinder,
a compression spring normally biasing said piston toward a door closing position, and
a self activated arresting mechanism for arresting an

SN 10/627,261
P-2487

associated door in an open position,

said arresting mechanism including a cam means and a
complementary follower means,

one of said means connected to said piston rod and the other
of said means connected to said cylinder wherein one of said
means is fixedly connected and the other of said means is
rendered rotatable relative to said fixed means,

said cam means is fixedly connected to said piston rod and
said follower means is rotatably journaled to said cylinder.

10. (Currently Amended) ~~A self activating door closer as~~
~~defined in Claim 1 wherein~~ A self activated arresting door closer
comprising:

a cylinder,

a piston reciprocally displaceable within said cylinder,

a piston rod connected to said piston,

said piston rod having a free end extending beyond the end
of said cylinder,

a compression spring normally biasing said piston toward a
door closing position, and

a self activated arresting mechanism for arresting an
associated door in an open position,

said arresting mechanism including a cam means and a

SN 10/627,261
P-2487

complementary follower means,

one of said means connected to said piston rod and the other
of said means connected to said cylinder wherein one of said
means is fixedly connected and the other of said means is
rendered rotatable relative to said fixed means,

said cam means is rotatably journaled to said cylinder and
said follower means fixedly connected to said piston rod.

11. (Canceled).

12. (Original) A self activating door closer as defined in
Claim 2 wherein said cam means includes a sleeve and said
indexing cam and arresting cams are formed on the outer surface
of said sleeve.

13. (Currently Amended) A self activating door closer as
defined in Claim 2 wherein said cam means includes a sleeve and
said indexing cam and arresting cams are formed on the inner
surface of said sleeve.

14. (Currently Amended) A self activating door closure as
defined in Claim 2 wherein said follower means being shaped to be
received within said channel ~~openings~~ opening and ~~connected~~

SN 10/627,261
P-2487

~~annular~~ said circumscribing channel.

15. (Currently Amended) A self activating arresting door closer as defined in Claim 6 wherein said dwell of each said ~~arresting cam is~~ arresting cams being disposed between adjacent pairs of channel openings.

16. (Original) A self activating arresting door closer as defined in Claim 6 wherein said cam means having alternating peaks and dwells whereby the alternate peaks are disposed opposite said dwells of adjacent arresting cams.

17. (Original) In a door closer having a cylinder, a piston reciprocally displaceable within said cylinder, a piston rod connected to said piston, said piston rod having a free end extending beyond the end of said cylinder and a compression spring normally biasing said piston toward a door closing position, the improvement of a self activating arresting mechanism for arresting an associated door in a door open position,

said self activating arresting mechanism including a cam means and a complementary cam follower means,

one of said means being connected to said cylinder and the

SN 10/627,261
P-2487

other of said means being connected to said piston rod whereby one of said means is rotatably journaled relative to said other means,

said cam means including an indexing cam and a plurality of arresting cams spaced from said indexing cam to define an annular channel therebetween,

a channel opening formed between adjacent pairs of said arresting cams, said channel opening being in communication with said annular channel whereby said cam follower is guided to one said channel opening upon the opening of an associated door, and

said indexing cam guiding said cam follower means to engage said arresting cam to prohibit an associated door from closing and to maintain an associated door in the arrested door position until said cam follower means is released from said arresting cam.

18. (Original) In a door closer as defined in Claim 17 wherein the release of said cam follower means from said arresting cam is effected by shifting the associated door slightly in the direction of the door opening position whereby said cam follower means engages said indexing cam and is guided to said channel opening, permitting the compression spring to advance an associated door to its fully closed position.

SN 10/627,261
P-2487

19. (Original) A door closer comprising:

a cylinder,

a piston reciprocally displaceable within said cylinder,

a piston rod connected to said piston,

said piston rod having a free end extending beyond an end of said cylinder,

a compression spring biasing said piston toward a door closing position, and

a self activated arresting mechanism for arresting an associated door in an open position,

said arresting mechanism including complementary components,

one of said components including a cam sleeve,

said cam sleeve having formed thereon a plurality of arresting cams,

each of said arresting cams having a dwell notch, and

a plurality of spaced apart indexing cam segments,

each said indexing cam segment having an inclined cam profile,

and the other of said components including a cam follower,

one of said components being connected to said piston rod and the other of said components being connected to said cylinder, and

SN 10/627,261
P-2487

one of said components being fixedly connected and the other of said components being rendered rotatable relative to said fixed component.

20. (Original) A door closer as defined in Claim 19 wherein said arresting cams and said indexing cams define a channel therebetween,

and dwell notches being disposed opposite an alternate inclined cam profile of said indexing cam segments.

21. (Original) A door closer as defined in Claim 20 wherein said adjacent arresting cams define therebetween a channel opening.

22. (Original) A door closer as defined in Claim 21 wherein said indexing cams include a cam profile for alternatively directing said cam follower to said dwell notch to arrest a door in the open position and to said channel opening to effect a door closing.